

In the Claims:

Amend claims 1, 2, 9, 11, 14, 16, 19 and 28 as follows:

1 1. (Amended) Surgical apparatus comprising:
2 an elongated cannula having distal and proximal ends and including a lumen
3 therein between ends for receiving an endoscope in rotatable orientation therein for
4 supporting rotation of the cannula about an endoscope disposed within said lumen;
5 and
6 an elongated control rod rotatably and translationally supported by the
7 cannula eccentric of said lumen, with a rigid dissection probe having a portion
8 eccentric the control rod and positioned at one end of the control rod near the distal
9 end of the cannula for rotational and translational positioning relative thereto, the
10 control rod including another end disposed near the proximal end of the cannula to
11 facilitate manual rotational and translational manipulation of the dissection probe
12 at said one end of the control rod in association with selective rotation of the
13 cannula about an endoscope disposed within said lumen.

1 2. (Amended) Surgical apparatus as in claim 1 wherein said distal end
2 of the cannula includes a recess for enclosing the dissection probe therein in
3 response to inward translational movement of the control rod relative to said distal
4 end and in response to rotational alignment of (a) the cannula about an endoscope

5 disposed within the lumen, and (b) the eccentric portion of dissection probe
6 rotatable with the control rod.

1 3. (Original) Surgical apparatus as in claim 2 including a fluid seal
2 disposed within the recess about the control rod near the distal end of the cannula
3 and disposed to receive an endoscope therethrough for maintaining fluid-tight
4 engagement in response to relative movement of the endoscope and control rod
5 relative to the fluid seal.

1 4. (Original) Surgical apparatus according to claim 2 including a fluid
2 seal disposed near the proximal end of the cannula for receiving an endoscope
3 therethrough to maintain fluid-tight engagement in response to relative movements
4 of the endoscope.

1 5. (Original) Surgical apparatus according to claim 2 wherein the
2 control rod and the dissection probe attached thereto translate relative to the
3 cannula from within the recess at the distal end thereof to a location spaced
4 forward of the distal end and within the viewing field of the endoscope.

1 6. (Original) Surgical apparatus as in claim 1 wherein an endoscope is
2 positionable in substantially fixed axial position relative to the ends of the cannula.

1 7. (Original) Surgical apparatus according to claim 6 wherein an
2 endoscope having a viewing end is positionable in fixed axial position relative to
3 the cannula with the viewing end recessed within the cannula inwardly from the
4 distal end thereof to exclude distal edges of the cannula from within a viewing
5 field of the endoscope.

1 8. (Original) Surgical apparatus as in claim 1 wherein the dissection
2 probe includes a substantial loop positioned in a plane skewed relative to the axis
3 of the control rod.

1 9. (Amended) Surgical apparatus comprising:
2 an elongated cannula having distal and proximal ends and including a first
3 lumen therein between ends for [rotatable] rotatably receiving an endoscope
4 therein; and
5 a second lumen in the cannula eccentric of the first lumen between the ends
6 of the cannula for supporting an instrument therein for rotational and translational
7 manipulation thereof near the distal end of the cannula via controls near the
8 proximal end of the cannula.

1 10. (Amended) Surgical apparatus as in claim [9] 1 including a fluid seal
2 disposed within the [second] lumen near the distal end of the cannula to receive an

3 instrument therethrough for maintaining fluid-tight engagement in response to
4 relative movement of the instrument relative to the fluid seal.

1 11. (Amended) Surgical apparatus as in claim 9 [wherein the] including
2 an endoscope as an instrument within the second lumen[includes an endoscope].

1 12. (Original) A method of endoscopic surgery with a cannula including
2 a dissection probe positionable thereon and including a lumen for receiving an
3 endoscope therein, the method comprising:

4 assembling an endoscope within the lumen of the cannula for rotation of the
5 cannula relative to the endoscope at substantially fixed axial orientation relative to
6 the cannula to provide visualization from a distal end of the cannula;

7 supporting the dissection probe on the cannula for rotation and translation
8 relative thereto and in eccentric orientation relative to visualization through the
9 endoscope, with the dissection probe near the distal end of the cannula;

10 inserting the distal end of the cannula within a surgical site; and

11 selectively rotating the cannula relative to the endoscope received therein,
12 and selectively rotating and translating the dissection probe relative to the cannula
13 for selectively positioning the dissection probe within the surgical site in
14 visualization through the endoscope.

1 13. (Original) A method of endoscopic surgery with a cannula including
2 a first lumen for receiving an endoscope therein, and a second lumen for receiving
3 therein an endoscopic instrument having an operative tip, the method comprising:
4 assembling an endoscope within the first lumen of the cannula for rotation of
5 the cannula relative thereto at substantially fixed axial orientation relative to the
6 cannula to provide visualization via the endoscope near a distal end of the cannula;
7 supporting the endoscopic instrument on the cannula for rotation and
8 translation relative thereto and in eccentric orientation relative to visualization
9 through the endoscope, with the operative tip of the endoscopic instrument near the
10 distal end of the cannula;
11 inserting the distal end of the cannula within a surgical site; and
12 selectively rotating the cannula relative to the endoscope received therein,
13 and selectively rotating and translating the endoscopic instrument relative to the
14 cannula for selectively positioning the endoscopic instrument within the surgical
15 site in visualization through the endoscope.

1 14. (Amended) Surgical apparatus as in claim 9 [wherein the] including
2 as an instrument within the second lumen [includes] an elongated rod with a
3 dissection probe attached at an end thereof disposed near the distal end of the
4 cannula.

15. (Previously Added) A method of endoscopic surgery with a cannula including an endoscopic instrument having an operative tip supported by the cannula for selectable positioning thereon and including a lumen for receiving an endoscope therein, the method comprising:

assembling an endoscope within the lumen of the cannula for rotation of the cannula relative to the endoscope at substantially fixed axial orientation relative to the cannula to provide visualization from a distal end of the cannula;

supporting the endoscopic instrument on the cannula for movement relative thereto and in eccentric orientation relative to the endoscope, and with the operative tip disposed near the distal end of the cannula;

inserting the distal end of the cannula within a surgical site; and

selectively rotating the cannula relative to the endoscope received therein, and selectively positioning the endoscopic instrument relative to the cannula for manipulating the operative tip within the surgical site in visualization through the endoscope.

16. (Amended) A method of endoscopic surgery with a cannula including an endoscopic instrument having an operative tip supported by the cannula for selectable positioning therein and including a lumen for receiving an endoscope therein, the method comprising:

5 assembling an endoscope within the lumen of the cannula for relative
6 rotation of the endoscope [relative to the] and cannula at substantially fixed axial
7 orientation of the cannula and endoscope to provide visualization from a distal end
8 of the cannula;

9 supporting the endoscopic instrument in the cannula for movement relative
10 thereto and in eccentric orientation relative to the endoscope, and with the cannula
11 configured with the operative tip disposed [near] within the distal end of the
12 cannula for insertion thereof into a surgical site;

13 inserting the distal end of the cannula within a surgical site; [and]
14 distally extending the operative tip from within the distal end of the cannula
15 within the surgical site; and

16 selectively rotating the cannula and endoscope relative to the [cannula, and
17 selectively positioning the] endoscopic instrument [relative to the cannula] for
18 rotationally manipulating the extended operative tip within the surgical site in
19 visualization through selective rotational positioning thereof relative to the
20 endoscope.

1 17. (Previously Added) Surgical apparatus comprising:

2 an elongated cannula having distal and proximal ends and including a lumen
3 therein between the ends for receiving an endoscope in rotatable orientation therein

4 for supporting relative rotation of the cannula and the endoscope disposed within
5 said lumen; and
6 an elongated endoscopic instrument supported by the cannula eccentric of
7 said lumen, with an operative tip positioned at one end of the endoscopic
8 instrument near the distal end of the cannula for selective positioning relative
9 thereto, the endoscopic instrument including another end disposed near the
10 proximal end of the cannula to facilitate manual manipulation of the operative tip
11 at said one end of the endoscopic instrument in association with selective relative
12 rotation of the cannula and the endoscope disposed within said lumen.

1 18. (Previously Added) Surgical apparatus as in claim 17 wherein said
2 distal end of the cannula includes a recess for enclosing the operative tip therein in
3 response to inward translational movement of the endoscopic instrument relative to
4 said distal end.

1 19. (Amended) Surgical apparatus as in claim 17 including a fluid seal
2 disposed within the cannula [abut] about the endoscopic instrument and disposed
3 to receive an endoscope therethrough for maintaining fluid-tight engagement in
4 response to [relative] movement of the [endoscope and] endoscopic instrument
5 relative to an endoscope received through the fluid seal.

1 20. (Previously Added) Surgical apparatus as in claim 18 including a
2 fluid seal disposed within the recess about the endoscopic instrument near the
3 distal end of the cannula and disposed to receive an endoscope therethrough for
4 maintaining fluid-tight engagement in response to relative movement of the
5 endoscope and the endoscopic instrument relative to fluid seal.

1 21. (Previously Added) Surgical apparatus according to claim 17
2 including a fluid seal disposed near the proximal end of the cannula for receiving
3 an endoscope therethrough to maintain fluid-tight engagement in response to
4 relative movements of the endoscope.

1 22. (Previously Added) Surgical apparatus according to claim 17 wherein
2 the endoscopic instrument translates relative to the cannula to position the
3 operative tip at a location spaced forward of the distal end and within the viewing
4 field of the endoscope.

1 23. (Previously Added) Surgical apparatus as in claim 17 wherein an
2 endoscope is positionable within the lumen in substantially fixed axial position
3 relative to the ends of the cannula.

1 24. (Previously Added) Surgical apparatus according to claim 18 wherein
2 an endoscope having a viewing end is positionable in fixed axial position relative
3 to the cannula with the viewing end recessed within the cannula inwardly from the

4 distal end thereof to exclude distal edges of the cannula from within a viewing
5 field of the endoscope.

1 25. (Previously Added) Surgical apparatus according to claim 17 wherein
2 an endoscope having a viewing end is positionable in fixed axial position relative
3 to the cannula with the viewing end disposed relative to the distal end of the
4 cannula to position the operative tip within a viewing field of the endoscope.

1 26. (Previously Added) Surgical apparatus according to claim 17 wherein
2 the endoscopic instrument and the operative tip attached thereto translate relative
3 to the cannula from near the distal end thereof to a location spaced forward of the
4 distal end and within a viewing field of an endoscope disposed within the lumen.

1 27. (Previously Added) Surgical apparatus comprising:
2 an elongated cannula having distal and proximal ends and including a first
3 lumen therein between the ends for rotatably receiving an endoscope therein; and
4 a second lumen in the cannula eccentric of the first lumen between the ends
5 of the cannula for supporting an endoscopic instrument therein having an operative
6 tip for selective manipulation of the operative tip near the distal end of the cannula
7 via manual controls disposed near the proximal end of the cannula.

1 28. (Amended) Surgical apparatus as in claim [27] 17 including a fluid
2 seal disposed in [each of] the [first and second] lumen in the cannula intermediate

- 3 the proximal and distal ends to receive an endoscope and an endoscopic instrument
- 4 therethrough for maintaining fluid-tight engagement in response to relative
- 5 movement of the endoscope and endoscopic instrument relative to a fluid seal.